

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~A~~ An isolated polypeptide having a thermostable ribonuclease H activity, selected from the group consisting of:

(a) a polypeptide having the amino acid sequence of SEQ ID NO:1; and

~~(b) a polypeptide having an amino acid sequence in which at least one amino acid residue is deleted, added, inserted or substituted in the amino acid sequence of SEQ ID NO:1; and~~

~~(c) a polypeptide having an amino acid sequence that shares at least 54% homology with the amino acid sequence of SEQ ID NO:1~~

(b) a polypeptide encoded by a nucleic acid hybridizing to the nucleotide sequence of SEQ ID NO:2 or a complementary strand thereof under conditions of incubation with a probe in 6 X SSC (1 X SSC: 0.15 M NaCl, 0.015 M sodium citrate, pH 7.0) containing 0.5% SDS, 0.1% bovine serum albumin (BSA), 0.1% polyvinylpyrrolidone, 0.1% Ficoll 400 and 0.01% denatured salmon sperm nucleic acid at 50°C for 12 to 20 hours followed by washing in 2 X SSC containing 0.5% SDS at

37°C while changing the SSC concentration down to 0.1 x and
the temperature up to 50°C until a signal from an immobilized
nucleic acid can be distinguished from background.

Claims 2-5. (Cancelled)

6. (Original) A ~~An isolated~~ polypeptide having a
thermostable ribonuclease H activity, ~~obtainable~~ obtained by
culturing a transformant into which a plasmid pApr108 harbored
by *Escherichia coli* HMS174/pApr108 (deposited under accession
no. FERM BP-8433) is transferred.